

INTEGRATED COOLING SUBSTRATE FOR EXTREME ULTRAVIOLET RETICLE

Abstract of the Disclosure

The current invention provides a method and apparatus that minimizes the destructive effects of non-reflected energy during lithography. More specifically, a cooling system is located within the mask. In one example, a cooling module is integrated into the EUV mask. The cooling module may be thermoelectric. The EUV mask comprises a substrate structure as a base for a reticle, a cooling layer, which is formed on the substrate structure and a planarizing layer deposited on the cooling layer. In another example, a cooling channel is formed within the mask.

Figures